

### **BEFORE THE**

## MINERALS MANAGEMENT SERVICE DEPARTMENT OF THE INTERIOR

## COMMENTS OF THE AMERICAN CHEMISTRY COUNCIL

**ON** 

# MMS NOTICE OF PROPOSED RULEMAKING – RELIEF OR REDUCTION IN ROYALTY RATES- DEEP GAS PROVISIONS

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#### INTRODUCTION

The American Chemistry Council (ACC) is pleased to submit these comments on the MMS "Notice of Proposed Rulemaking for Relief or Reduction in Royalty Rates- Deep Gas Provisions" published in the Federal Register on March 26, 2003. 68 Fed. Reg.14867. ACC represents the U.S.'s leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to produce innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The \$460 billion business of chemistry is a key element of the nation's economy. It is the country's largest exporter, accounting for ten cents out of every dollar in U.S. exports. Chemistry companies invest more in research and development than any other business sector. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure.

#### I. <u>SUMMARY</u>

The U.S. chemistry business is highly dependent on natural gas, both as a source of fuel and as a raw material for many of its products. Our industry is a significant component of the U.S. economy. However, despite our advances in energy efficiency, this contribution requires enormous quantities of reasonably priced natural gas. Current high natural gas prices, caused primarily by constrained supplies and increased demand, are having a devastating impact on our industry. Federal government policies that contribute to constrained domestic natural gas production and caused utilities and other industries to switch from other fuels to natural gas contribute to our industry's situation. If the U.S. chemistry business is to remain competitive in today's global market and continue to contribute revenue, jobs, research and other benefits to the U.S. economy, natural gas prices must come down. Appropriate federal policies are needed to ensure a better balance between the supply of and demand for natural gas, and to keep prices at a globally competitive level.

#### II. THE BUSINESS OF CHEMISTRY IS HIGHLY DEPENDENT ON NATURAL GAS

The current price of natural gas is the chemical industry's number one economic issue. Natural gas is the lifeblood of the chemistry business in the U.S. Not only do we use natural gas as a fuel in our manufacturing processes, much like other industries, but we also use it as an ingredient, or feedstock, for many of the products we make.

Natural gas and natural gas liquids contain hydrocarbon molecules that are split apart during processing and then recombined into useful chemical products. These products include life-saving medicines, health improvement products, technology-enhanced agricultural products, more protective packaging materials, synthetic fibers and permanent press-clothing, longer-lasting paints, stronger adhesives, faster microprocessors, more durable and safer tires, lightweight automobile parts, and stronger composite materials for aircraft and spacecraft. The business of chemistry also makes many of the products that help save energy throughout the entire economy, including insulation, house wraps, lubricants, and high-strength light-weight materials, enabling American industries and consumers to be more energy efficient.

The business of chemistry is the only part of the economy that adds value to these hydrocarbon molecules rather than combusting them for energy.

Natural gas accounts for nearly thirty-nine percent of all energy consumption by the business of chemistry. Natural gas liquids that are derived from natural gas or refinery operations account for another twenty-three percent. In total, more than half of the U.S. business of chemistry's energy needs come from natural gas.

On average, more than \$1 of every \$10 the industry spends on materials is for natural gas. For some petrochemical producers, natural gas represents nearly one-quarter of the cost of materials. And nitrogenous fertilizer producers spend \$9 of every \$10 for natural gas.

The U.S. business of chemistry has invested billions of dollars in facilities that make chemical products from natural gas and natural gas components. These facilities do not have the ability to switch to other inputs and produce these products. This infrastructure was built based on the competitive advantage the U.S. offered through its natural gas supply.

While the U.S. chemistry business is the nation's single largest manufacturing consumer of natural gas, we are extremely energy efficient in the use of that gas. Through the use of combined heat and power ("CHP") generation, our facilities create two forms of energy - electric energy and thermal energy or steam, and both are put to work. The efficiency rating of many of our CHP facilities is often twice that of traditional electric generators. This efficiency level is further enhanced because the generation is physically located close to where it is used, avoiding transmission line losses. Use of CHP technologies by the business of chemistry accounts for nearly a third of all CHP used in manufacturing. And through the use of CHP technology, the business of chemistry has reduced its total fuel and power energy consumption per unit of output by more than forty-three percent since 1974. Nonetheless, our industry's natural gas fuel needs remain substantial.

Because of our industry's dual use of natural gas, as well as our significant presence in the U.S., the business of chemistry today accounts for eleven percent of domestic natural gas consumption, second only to electric utilities. As a result, changes in the natural gas market, such as constricted supply and inflated prices, have a particularly severe impact. In order for the domestic business of chemistry to remain competitive in the global marketplace and to be able to continue to provide employment and other benefits here at home, it is essential that measures be taken to increase natural gas supplies and to make these supplies available at reasonable prices.

#### III. NATURAL GAS DEMAND IS INCREASING, SUPPLY IS SHORT, AND PRICES ARE HIGH

The recent history of natural gas prices is a study in commodity price volatility. On January 4, 2000, the average spot price of natural gas at the Henry Hub was \$2.15/MMBtu. On January 5, 2001, the price had spiked up to \$9.82/MMBtu. On January 4, 2002, the price was \$2.36/MMBtu and on January 3, 2003, the average spot price at the Henry Hub was \$5.13/MMBtu. While this extreme volatility is indicative of a very tight supply situation in general, the more worrisome aspect of the experience of the last three years is what it foretells for the long-term. Historically, when gas prices began an upward climb, producers responded to the higher prices by drilling more wells, which produced additional supply and consequently lowered the price.

Our experiences over the past few years have not followed this history. Although gas producers responded to the extraordinary high prices of 2001 by greatly increasing the number of wells drilled, this activity did not lead to a commensurate increase in supply. The supply of natural gas actually increased only marginally during 2001 despite record high levels of drilling rigs operating. The price decline from January 2001 to January 2002 was a result of what economists call "demand destruction," brought about by a mild spring and summer and, ominously, the closing or curtailment of manufacturing facilities. In other words, prices dropped not because supply increased, but because demand decreased.

The reaction of producers during this most recent price run-up is much more cautious. Fewer new rigs are going into the fields and gas production has not responded to higher prices. This "Catch-22" response of producers not placing new rigs in service because they are fearful that prices will drop before they can recoup their costs only serves to keep the price high.

A disturbing reality of the U.S. natural gas market is that nearly 70% of it is price insensitive. This means that 70% of gas consumers have no option to either stop using energy or to use a different form of energy and must pay whatever the price is for the gas they need. The remaining 30% of demand, predominantly industrial manufacturers, can adjust to gas price swings by switching to more reasonably priced fuels or by ceasing to operate their manufacturing facilities. It is in this 30% that demand destruction occurs. In the past, this demand destruction generally has been temporary. Higher prices led to increased production and lesser demand, thereby increasing supply and moderating prices. Once prices returned to more economic levels, industrial consumers switched back to natural gas or restarted idled facilities.

In light of recent trends – record numbers of working drill rigs in 2001 did not increase supply; more stringent air quality regulations limit or eliminate the ability to fuel switch; ever increasing demand for natural gas from price insensitive users -- there is a significant risk that this historical pattern will not repeat itself. Rather, ACC is concerned that temporary demand destruction may become permanent demand destruction for many of its members.

#### IV. THE IMPACT OF HIGH GAS PRICES

Restricted supplies and high prices for natural gas severely limit the ability of U.S. chemical manufacturers to remain competitive with foreign competitors. The business of chemistry in the U.S. is concentrated in the Gulf Coast region largely because of the region's proximity to a traditionally abundant, low cost supply of natural gas resources. While about seventy percent of U.S. petrochemicals production uses natural gas as a feedstock, the same percentage of producers in Western Europe and Asia use naphtha, a crude oil derivative. Unlike crude oil, the price of which is set by the global market, natural gas is not as broadly traded, with the result that price increases for natural gas in North America are felt only in North America. For many years, the U.S. business of chemistry enjoyed the benefit of relatively low cost feedstocks relative to our foreign competitors, enabling the industry to become the global leader in chemical products. A tightened natural gas market and soaring natural gas prices, however, put this position in jeopardy. For the business of chemistry, experience shows that, although this number fluctuates depending on the price of crude oil, the price for natural gas at which we become unable to compete in global markets is between \$3.25 and \$4.00. Current prices are hovering around \$6.00.

High natural gas prices significantly cut into our industry's profitability. For every one-dollar increase in the price of natural gas, over the course of a year, our industry incurs approximately \$4.2 billion in additional costs. Yet, because we compete in a global market, U.S. companies are unable to pass these added costs for natural gas along to their customers if our products are to remain competitively priced with those produced by our foreign competitors. In 1999, when the price of natural gas averaged \$2.27, the operating margin for basic chemical companies was 6.8%. In 2001, when the price of natural gas rose to an average of \$4.27, the operating margin dropped to 0.6%.

High natural gas prices also negatively impact productivity and employment in our industry. In any industry, a company faced with declining profitability must evaluate whether or not to continue operations. During the 2000-2001 "spike" in natural gas prices, many companies idled their operations. About fifty percent of the industry's methanol capacity and fifteen percent of the industry's ethylene capacity were simply shut down during this time. Many workers were sent home. As natural gas prices came down plants reopened. These relatively short-term increases in natural gas prices led to relatively short-term shutdowns. However, there are serious questions regarding how these companies will respond over the long-term if faced with a business environment with sustained conditions of tightened natural gas supply and high natural gas prices. For our employees, demand destruction sooner or later becomes job destruction.

As the second largest consumer of natural gas in the United States, trailing only electric utilities, the business of chemistry has been severely affected by these steep increases in natural gas prices. Prior to the run-up in gas prices in 2000 and 2001, the business of chemistry, America's largest export industry, contributed one of the nation's highest positive trade balances. Today, after two years of high gas prices, our industry is facing a negative trade balance for the first time ever. High U.S. manufacturing costs, tied to inflated natural gas prices, allow foreign competitors, who do not face the same elevated energy and feedstock prices, to become low cost producers and capture market share at our expense. This has resulted in thousands of jobs lost and plants shut down, and the movement of investment capital overseas.

The combined effect of higher natural gas prices led to fewer U.S. exports, greater U.S. imports, and a rising U.S. trade deficit. As a result, the U.S.'s export levels in 2001 fell at least \$13.5 billion, \$4.5 billion of which was attributable to the business of chemistry.

Historically, ethylene production based on U.S. ethane (from natural gas) has had the lowest cost per pound after the Middle East, which has abundant inexpensive natural gas resources. However, in 2002, that low cost position was eroded. In 2002, ethylene production costs rose globally as the price of oil also rose above historic levels. Natural gas experienced higher price increases relative to oil, however, with the result that U.S. ethane-based production lost its clear low cost position.

Although the impact on our business is felt particularly hard, the chemical industry is not alone. For example, the U.S. fertilizer industry is similarly dependent upon natural gas and similarly affected, as are its customers, America's farmers. U.S. consumers also are affected in everything from increased home heating and electricity costs to higher prices on consumer goods as production costs rise. Those at the lower end of the income scale are particularly hard hit.

#### V. POLICY RECOMMENDATIONS

Faced with the rising demand for natural gas and falling levels of domestic production, and the resultant impact on natural gas prices, it is now more important than ever to look for ways to promote abundant and diversified sources of domestic energy, including natural gas, coal, oil, nuclear, and cost-competitive renewable resources. Natural gas prices need not be this high. Appropriate policies can ensure adequate supplies of natural gas, helping keep prices at a reasonable level and therefore helping U.S. companies to remain competitive in the global market.

The U.S. must increase its domestic production of natural gas. Recent legislative, regulatory and market trends have placed greater demands on our natural gas supply without providing for commensurate measures to increase production.

To do this, initiatives to place moratoria on new exploration and production must be rejected. In addition, new promising areas should be opened to exploration and production. This includes portions of the Rocky Mountain region, the Outer Continental Shelf areas, and the Eastern Gulf of Mexico and Alaska. ACC believes that current gas fields are quite mature and failing to adequately meet current demand. Rig counts in these mature fields rose dramatically in response to the 2000-01 price spikes, but gas production did not. Access to new reserves is necessary not only to meet new demands, but simply to sustain current production levels.

#### VI. COMMENTS SPECIFIC TO THE NOPR

ACC supports the concepts given in the notice since they do support increased supply of natural gas. However, it is believed that deep well drilling in shallow water can be fairly risky, so that the net impact of the proposed relief may be limited, though definitely of value. In addition, the relief would be limited in effect to those entities working in the shallow water areas. Expansion of the relief to other areas might be considered in order to incentivize broader activity.

ACC believes that other opportunities should also be provided for exploration and production in conjunction with royalty relief. The Administration should consider opening additional promising areas for exploration and production.

Tax credits or other incentives have provided an effective stimulus to increased drilling and production in the past, and those options should also be considered and advanced by the Administration as appropriate. For example, incentives for additional production from unconventional gas resources such as tight sands could be an effective approach.

ACC appreciates the opportunity to present our views and concerns relative to natural gas supply. We stand ready to discuss these comments and assist in finding ways to improve the current natural gas supply/demand imbalance.